

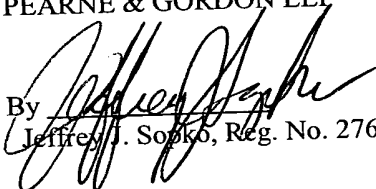
REMARKS

If there are any additional fees resulting from this communication not covered by the enclosed check, or if the check was omitted, please charge all uncovered fees to our Deposit Account No. 16-0820, our Order No. 33632.

Respectfully submitted,

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By

  
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CLAIMS

5        1. A 5-direction key operating device in which  
diaphragms respectively corresponding to five directions are  
proximately arranged in a shape of a cross, which comprises  
pushers corresponding to the five directions on a key core  
face opposed to the diaphragms, and in which a single key is  
10        enabled to perform key operations of the five directions, and  
characterized in that

each of diaphragm contacts which are disposed on a  
printed circuit board opposed to the diaphragms is structured  
to have a first contact, and at least one second contact  
15        surrounding the first contact, at least one strip-like  
contact portion which are elongated from each of the second  
contact to a side opposite to a side of the first contact is  
disposed in the second contact, and

the diaphragm contacts are arranged on the printed  
20        circuit board in a shape of a cross correspondingly with the  
five directions with tilting the strip-like contact portions  
of the diaphragm contacts by about 45 degrees to vertical and  
horizontal directions.

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2. The 5-direction key operating device according to claim 1, wherein the strip-like contact portions are elongated in a fan-like shape with respect to a center of the first contact.

3. The 5-direction key operating device according to claim 1, wherein the strip-like contact portions are rectangular.

4. A 5-direction key operating device characterized in that five diaphragms are proximately arranged in a shape of a cross, pusher portions are disposed on a key core face opposed to the diaphragms, and a structure of a center pusher portion is different from a structure of pusher portions surrounding the center pusher portion.

5. (AMENDED) The 5-direction key operating device according to claim [1] 4, wherein a height of the center pusher portion from the diaphragm is different from a height of the surrounding pusher portions from the respective diaphragms.

6. (AMENDED) The 5-direction key operating device according to claim [1] 4, wherein a shape of the center pusher portion is different from a shape of the surrounding pusher portions.

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7. (AMENDED) The 5-direction key operating device according to claim [1] 4, wherein a cross-sectional diameter of the center pusher portion is different from a cross-sectional diameter of the surrounding pusher portions.

8. (AMENDED) The 5-direction key operating device according to claim [1] 4, wherein one of a rib and a boss stands from an arbitrary position of the key core face which comprises the pusher portions.

9. A 5-direction key operating device characterized in that five diaphragms are proximately arranged in a shape of a cross, and a structure of a key skirt portion which is formed in a periphery of a key core face opposed to the diaphragms is changed.

10. (AMENDED) The 5-direction key operating device according to claim [6] 9, wherein one of a width and thickness of the key skirt portion is changed.

11. (AMENDED) The 5-direction key operating device according to claim [6] 9, wherein a shape of the key skirt portion is changed.

12. A 5-direction key operating device characterized in

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that five diaphragms are proximately arranged in a shape of a cross, and a load on a center diaphragm is changed from loads on surrounding diaphragms.

13. (AMENDED) The 5-direction key operating device according to claim [9] 12, wherein pusher portions are disposed on a key core face opposed to the diaphragms, and a structure of a center pusher portion is different from a structure of pusher portions surrounding the center pusher portion.

14. (AMENDED) The 5-direction key operating device according to claim [10] 13, wherein one of a rib and a boss stands from an arbitrary position of the key core face on which the pusher portions exist.

15. (AMENDED) The 5-direction key operating device according to claim [9] 12, wherein a structure of the key skirt portion which is formed in a periphery of the key core face opposed to the diaphragms is changed.

16. (AMENDED) The 5-direction key operating device according to claim [9] 12, wherein pusher portions are disposed on the key core face opposed to the diaphragms, a structure of a center pusher portion is different from a structure of pusher portions surrounding the center pusher

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portion, and a structure of the key skirt portion which is formed in a periphery of the key core face opposed to the diaphragms is changed.

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